ENVIRONMENTAL CHEMISTS

Date of Report: 03/02/99 Date Received: 02/11/99

Project: Metro Self Monitor, PO# M78354

Date Samples Extracted: 02/26/99 Date Extracts Analyzed: 03/01/99

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID		<u>Chromium</u>	Copper	Nickel	<u>Zinc</u>
M78354		0.30	0.22	0.33	<0.05
Method Bla	ınk	< 0.05	< 0.05	< 0.05	< 0.05

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Date of Report: 03/02/99 Date Received: 02/11/99

Project: Metro Self Monitor, PO# M78354

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 902046-01 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent	Assentance		
Analyte	Units	Result	Result	Difference	Acceptance Criteria		
Chromium	mg/L (ppm)	0.30	0.31	3	0-20		
Copper	mg/L (ppm)	0.22	0.23	4	0-20		
Nickel	mg/L (ppm)	0.33	0.35	6	0-20		
Zinc	mg/L (ppm)	< 0.05	< 0.05	nm	0-20		

Laboratory Code: 902046-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recove	ry % Recovery	Acceptance	
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	5	0.30	100	101	80-120	1
Copper	mg/L (ppm)	5	0.22	98	89	80-120	10
Nickel	mg/L (ppm)	10	0.33	100	102	80-120	2
Zinc	mg/L (ppm)	5	< 0.05	106	110	80-120	4

Laboratory Code: Laboratory Control Sample

Laboratory Cour	. Eudoratory Con	CLUI DUILI	O1C						
	Reporting	Spike	% Recovery	% Recover	y Acceptance				
 Analyte	Units	Level	LCS	LCSD	Criteria	RPD			
Chromium	mg/L (ppm)	5	103	103	80-120	0			
Copper	mg/L (ppm)	5	105	104	80-120	1			
Nickel	mg/L (ppm)	10	102	102	80-120	0			
Zinc	mg/L (ppm)	5	101	104	80-120	3			

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

902042 MM AZ3 2/41/89 13:3-

SAMPLE CHAIN OF CUSTODY

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01/22/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 2, 1999

DUPLICATE COPY

INVOICE #99ACU0302-3

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M78354: Results of testing requested by Gerry Thompson for material submitted on February 11, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 2, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 11, 1999 from your Metro Self Monitor, PO# M78354 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0302R.DOC